

A HYDROGEL INJECTION GROUT TO STOP WATER FLOW

DESCRIPTION

A hydrogel injection grout used to stop water seepage and depending on the amount of water forms a flexible foam or elastomeric gel. It is a solvent free material that will only react when it comes into contact with water.

Contite G800 is a hydrophilic prepolymer that reacts with water over a range from 1:1 to 1:4 (polymer to water) forming an impermeable, elastomeric foam and at a ratio 1:5 to 1:10 (polymer to water) a resilient elastomeric gel. Properly applied **Contite G800** adheres to the surfaces and forms a resilient, rubbery gasket that stops the water.

Depending on the amount of water it may be injected direct as a single component system into the leaking crack or joint or as two component system by means of a mixing/metering machine, using water as a second component.

USES & ADVANTAGES

Contite G800 is used in applications where there is water seepage i.e. in tunnels, basements, manholes, and other underground structures.

Typical areas of use are:-

- Shutting of water seepage.
- As a liquid but solidifying membrane applied to the positive side.
- As a vertical barrier in masonry walls.
- For the activated oakum technique.
- In re-injectable hoses.
- Soil stabilization etc.

Advantages include:-

- Solvent free.
- Reacts with water.
- May use as a single or two component system.
- Good adhesion on wet as well as on dry concrete.
- Low viscosity therefore good penetration.
- The curing time can be adjusted by changing the amount of water.
- Can be used as foam or as gel.

PROPERTIES

Colour :	dark brown
SG kg/m ³ :	1.10-1.11
Viscosity at 25°C :	200-300 mPa.s

APPLICATION

To prevent condensation on the liquids at the start of work the temperature of the components should be at least as high as the ambient temperature.

All opened drums of **Contite G800** should be purged with dry nitrogen and capped when not in use.

The next table shows the dependence of the cream & gel time on the increase in water ratio.

Cream & Gel Time Dependent on the ratio Polymer/Water

Ratio hydrogel /water	Cream (sec.)	Gel (sec.)	End product**
1:1	50	140	Res. foam
1:2	75	145	Res. foam
1:4	80	150	Exp. gel
1:5	85	155	Exp. gel
1:7	115	190	Gel
1:10	325	500	Tacky gel

The times were measured at 20°C.

** Exp. gel : Expansive gel.

Res. foam : Resilient foam at free foaming conditions.

To check the reaction we advise the following test.

100 parts by weight **Contite G800**

x parts by weight water (see above Table)

Add water according to the above to the **Contite G800** and mix.

To measure the cream, the gel, the rise and the tack free time use the following procedure.

- The start time (point 0) is the time after the water is added and mixing starts.
- The cream time is the time at which the mix starts foaming.
- The gel time is the time the material is no longer able to flow.

Depending on the situation **Contite G800** can be pumped by the use of a single component injection pump equipped for higher pressures to withstand the water pressure or where water is used as the second component **Contite G800** should be pumped with a two component injection pump.

After the injection is completed flush the mixing head with water first and then with **Contite Purge**.

PACKAGING

Contite G800 10 kg in a can
Other packaging units on request.

Contite® G800



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STORAGE & SHELF LIFE

Contite G800 is very stable when properly handled. To avoid problems, it is very important to understand that these materials are both temperature and moisture sensitive. Therefore, materials should be stored in an area with temperatures not exceeding 35°C or not lower than 5°C, the shelf life is approximately 6 months in unopened drums. All part used drums should be covered by nitrogen and re-sealed to prevent the ingress of moisture.

HEALTH & SAFETY

Ordinary hygienic principles, such as washing the compounds from the hands before eating or smoking should be observed. Hands should be washed with a waterless cleaner followed by soap and water. Avoid breathing of vapours, prolonged contact with the skin, contact with open breaks in the skin, and ingestion. Use **Contite G800** with adequate ventilation.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord

CONTACT DETAILS

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